

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title: GAS COMPONENT SENSOR FOR
GAS OXIDES

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INFORMATION DISCLOSURE
STATEMENT

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09/917072



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ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Attached is a completed Form PTO-SB-42. Following are comments on the cited prior art, especially on any non-English language references pursuant to Title 37 Code of Federal Regulations Section 98:

Essalik et al (Study of a new solid electrolyte thin film micropotentiometric carbon dioxide gas sensor, J. New Mat. Electrochemical Systems 1, 67-70 (1998) discloses a thin film CO₂ sensor with a composition similar to the invention electrolyte without ions of the electrode metal or different electrode metals.

US Patent 4388155 discloses a shielded side sensor illustrating the operation problems of exposing both electrodes to the sensed gas.

EP Application 91113350.2 discloses a sensor of the NASICON type requiring specific ratios of alkali metal carbonates to alkaline metal carbonates.

US Patent 5759366 discloses a solid electrolyte ceramic with alkali ion conductivity, and two electrodes of conductor material inert with respect to the electrolyte.

US Patent 4715944 discloses an allegedly stable operation CO₂ sensor having a gas shielding layer with respect to the electrolyte thereby protected.

US Patent 5910239 discloses titanium dioxide or tin dioxide used in alkali/alkaline earth metal based electrolyte.

Respectfully submitted,

Dated: 7/25/01

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